INTERNAL CORRESPONDENCE

METALS DIVISION

137 FALLS STREET, P O BOX 596, NIAGARA FALLS, NEW YORK 14302

To: Mr. D. H. Hawkes
Location: Safety Administrator

Date: November 4, 1966

Originating Dept: Works Spectrographic

Answering letter date:

Copies to: Mr. F. L. Evans + Mr. A. H. Soeder
Mr. J. W. Norwood
Mr. P. J. Sitzenstatter
Mr. C. H. Weaver
Mr. L. J. LaFrance + Mr. P. McDaniel

Subject: Radiation Measurements on Manufacturing Operations Involving Araxa Niobite

The continuation of Run 265 30:1 Ferrocolumbium started October 31, 1966, finished the following day, and produced Taps #5 through #18.

Readings taken with the ANC 100 x L radiation detector were taken at various places around furnace 29A from attitudes duplicating working positions of the operators, Tabulation as follows:

Cold charge of drums in the shell	0.5	MR/HR
Ore mix pile on deck	2 to 3	"
Deck around furnace and top hamper structure	>0.5	"
From deck toward shell during heat	>0.5	"
From operator's position during tapping	>0.5	"
At top of covered fume collecting drums	0.5	"
Against side of fume conveyor discharge chutes leading down into collecting drums	2 to 3	"
Cold slags accumulated in grid	2 to 3	"
Cleanup sweepings	1 to 2	"

With reference to the previous letter of July 26, 1966, it will be noted that no increase of any radiation hazards are evident.

The approaches to the furnace are properly marked as radiation area as well as the grids and waste containers. Instructions are prominently posted on the furnace deck instructing the operators in the special safety procedures of this operation, One omission was noted during the tapping operation when the sampler didn't use a respirator. Comment was made at the time to the operation foreman that the men should be trained to use the respirator whenever there is possibility of inhaling any particles air borne from this operation. The fume from this operation is quite chemically reactive and is irritating to the nasal passages, This circumstance could be a fortunate one making the operators more readily attentive to proper safety practices.

The metal product resulting from this run was studied in the #2 Packing Dept. No appreciable radiation level was apparent on any of the pieces of finished taps stored there prior to cleaning and sizing. The sample preperation room showed no residual level after normal cleanup.

All personnel in any way involved with the materials of this operation have been instructed in proper safety practices. In the immediate future, a supply of adhesive labels carrying the "Radioactive - Material" legend and radiation symbol are to be provided for marking all the containers for such products resulting from the operation. Rubber stamps producing such imprint are to be provided for marking requisition slips and sample packages as well. It is important that all waste products of this operation be accumulated for singular disposal under the conditions of the State License.

In conclusion, it appears that the safety precautions previously established for this operation are proving satisfactory.

Ernest W. Schustek
Niagara Works Spectroscopist
Niagara Works Radiation Protection Officer

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